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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,493	12/11/2003	John R. Davey	51461/RVW/J222	1832

23363 7590 11/15/2004

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EXAMINER
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KRECK, JOHN J

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/735,493

Applicant(s)

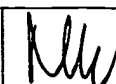
DAVEY ET AL.

Examiner

John Kreck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **grinder head driven by the drive shaft** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites "further comprising... a pivot adjuster". This is unclear since the pivot adjuster was already claimed in claim 21.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita (U.S. Patent number 4,405,177).

Yamashita teaches the grinder including a grinder head assembly with a plurality of grinder bits and a downward pressure adjuster as called for in claim 28.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-14, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupton (U.S. Patent number 4,762,371) in view of Yamashita (U.S. Patent number 4,405,177).

Lupton teaches a grinder vehicle comprising a drive unit (e.g. 10) having a frame and wheels; a drive unit engine (not explicitly disclosed, but inherent); a drive shaft(not explicitly disclosed, but inherent); and a grinder head assembly driven by the drive shaft (see col. 3, lines 11-14: "power take-off").

Lupton fails to teach the plurality of grinder heads.

Yamashita teaches a similar apparatus which uses a plurality of grinder heads, in order to remove surface marking from roads. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Lupton vehicle to have a plurality of grinder heads, as called for in claim 1, and as shown by Yamashita, in order to remove road markings.

Yamashita also teaches the wheel comprising a plurality of bits as called for in claim 2.

With regards to claim 3: Yamashita teaches "hard metal" not explicitly tungsten carbide. Official notice is taken of the fact that WC is commonly used as a hard metal for such tools, because it is hard and durable; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have used WC bits.

Lupton teaches the downward pressure adjuster (36) as called for in claim 4.

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Lupton teaches the hydraulic cylinder(36) as called for in claim 5.

Lupton teaches the pivot adjuster as called for in claim 6. (Note the hydraulic cylinder of Lupton (36) also functions to adjust the pivot at 32---applicant's claim is written broadly enough to encompass this-- note that Due (U.S. Patent number 6,786,556) teaches a lateral pivot adjuster).

With regards to claim 7: Yamashita teaches the housing (e.g. 21); and Lupton teaches the pivot adjuster.

With regards to claims 9-11: Official notice is taken of the fact that such performance characteristics are commonly found in prior art grinder vehicles; and are largely matters of engineering design. It would have been obvious to one of ordinary skill in the art at the time of the invention to have at least a 24 hp engine; 0-12mph speed; and 200-1600 rpm as called for in claims 9-11. Applicant is invited to provide evidence of unexpected results due to specific power or speed characteristics.

Regarding independent claim 12:

Lupton teaches a grinder vehicle comprising a drive unit (e.g. 10) having a frame and wheels; a drive unit engine (not explicitly disclosed, but inherent); a drive shaft(not explicitly disclosed, but inherent); a grinder head assembly driven by the drive shaft (see col. 3, lines 11-14: "power take-off"); and downward pressure adjuster.

Lupton fails to teach the plurality of grinder heads and main shaft.

Yamashita teaches a similar apparatus which uses a plurality of grinder heads, in order to remove surface marking from roads. It would have been obvious to one of

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ordinary skill in the art at the time of the invention to have modified the Lupton vehicle to have a plurality of grinder heads, as called for in claim 12, and as shown by Yamashita, in order to remove road markings.

Lupton teaches the hydraulic cylinder as called for in claim 13.

With regards to claim 14: Yamashita teaches the wheel and the bits of "hard metal", but not explicitly tungsten carbide. Official notice is taken of the fact that WC is commonly used as a hard metal for such tools, because it is hard and durable; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have used WC bits.

With regards to claims 18-20: Official notice is taken of the fact that such performance characteristics are commonly found in prior art grinder vehicles; and are largely matters of engineering design. It would have been obvious to one of ordinary skill in the art at the time of the invention to have at least a 24 hp engine; 0-12mph speed; and 200-1600 rpm as called for in claims 18-20. Applicant is invited to provide evidence of unexpected results due to specific power or speed characteristics.

5. Claims 21 –27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupton (U.S. Patent number 4,762,371) in view of Yamashita (U.S. Patent number 4,405,177) and Due (U.S. Patent number 6,786,556).

Lupton teaches a grinder vehicle comprising a drive unit (e.g. 10) having a frame and wheels; a drive unit engine (not explicitly disclosed, but inherent); a drive shaft(not explicitly disclosed, but inherent); a grinder head assembly driven by the drive shaft

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(see col. 3, lines 11-14: "power take-off"); and hydraulic cylinder for varying downward pressure.

Lupton fails to teach the plurality of grinder heads and main shaft. Lupton fails to teach the pivot adjuster.

Yamashita teaches a similar apparatus which uses a plurality of grinder heads, in order to remove surface marking from roads. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Lupton vehicle to have a plurality of grinder heads, as shown by Yamashita, in order to remove road markings.

Due teaches a similar apparatus which uses a pivot adjuster connected the grinder head in order to pivotally adjust the grinder to accommodate roadway variations. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Lupton device to have a pivot adjuster as called for in claim 21; in order to accommodate roadway variations.

With regards to claim 22: Yamashita teaches the wheel and the bits of "hard metal", but not explicitly tungsten carbide. Official notice is taken of the fact that WC is commonly used as a hard metal for such tools, because it is hard and durable; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have used WC bits.

Yamashita teaches the housing called for in claim 23.

Due teaches the threaded rod and arm as called for in claim 24.



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With regards to claims 25-27: Official notice is taken of the fact that such performance characteristics are commonly found in prior art grinder vehicles; and are largely matters of engineering design. It would have been obvious to one of ordinary skill in the art at the time of the invention to have at least a 24 hp engine; 0-12mph speed; and 200-1600 rpm as called for in claims 25-27. Applicant is invited to provide evidence of unexpected results due to specific power or speed characteristics.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (U.S. Patent number 4,405,177) in view of Due (U.S. Patent number 6,786,556).

Yamashita teaches the grinder head assembly. Yamashita fails to teach the pivot adjuster.

Due teaches a similar apparatus which uses a pivot adjuster connected the grinder head in order to pivotally adjust the grinder to accommodate roadway variations. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Yamashita device to have a pivot adjuster as called for in claim 29; in order to accommodate roadway variations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on M-F 5:30 am - 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Kreck  
Examiner  
Art Unit 3673

JJK